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REMARKS

Claims 1, 2, 3, 6, 7, 8, and 9 have been amended. Claims 1 – 9 are pending in this Application. No new matter has been added. Support for the amendments to the claims is set forth in the Applicants' specification at pages 123 – 127. Reconsideration and further examination is respectfully requested.

Applicants note that the Office Action has indicated that claims 1 – 8 are pending and rejected. The Applicants point out that claim 9 was added in Applicants' amendment in the parent case, dated February 25, 2002. Paragraph 3 of the detailed action indicates that a rejection of claim 9 has been withdrawn.

Applicants further note that though claim 5 is indicated by the Office Action Summary as rejected, paragraph 3 of the detailed action withdraws the outstanding rejection of claim 5. Claim 5 is not further addressed by the Office Action.

The Applicants respectfully request the withdrawal of the Finality of the current Office Action and clarification with regard to the status of claims 5 and 9.

Claim Rejections – 35 USC §103

Claims 1 – 3 and 6 – 8 were rejected under 35 U.S.C. 103(a) as being unpatentable over the Symmetrix Model 5500 Product Manual, Rev. G, EMC Corp., pp 1 – 236 ("Symmetrix Product Manual"), in view of Litt, U.S. Patent No. 5,815,651, and further in view of van der Wal,

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A., "Efficient Interprocessor Communication in a 'Tightly Coupled Homogeneous Multiprocessor System", Proc. Of the IEEE Workshop on Future Trends of Distributed Computing Systems, IEEE, pp. 362 – 368, October 1990 ("van der Wal"). This rejection is respectfully traversed.

The Applicants' exemplary claim 1 sets forth:

"A messaging mechanism for inter-processor communication comprising:  
a shared service processor providing a single point of contact for a user  
interfacing with at least one line processor, the service processor in electrical  
communication with shared memory including mailboxes operable to enable  
communication between the at least one line processor and the service processor,  
wherein

the service processor is operable to selectively receive commands from a  
respective mailbox of a selected one of said at least one line processor, and

the at least one line processor is selectively operable to issue a system  
management interrupt to the service processor, the interrupt signaling to the  
service processor to access a respective mailbox in the shared memory;

wherein the service processor is operable to access storage on behalf of the  
at least one line processor in response to the contents of the mailbox."

The Applicants' invention sets forth a highly efficient interprocessor communication mechanism whereby a service processor uses mailbox communication with one or more line processors to access storage on behalf of the line processors.

The Symmetrix Product Manual sets forth a storage system containing a service processor. The Symmetrix Product Manual does not address a means of communication between the service processor and any line processors; nor does it address any ability for the service processor to perform tasks on behalf of the line processors.

Van der Wal discusses a multiprocessing system in which processors can communicate using mailboxes. Van der Wal, like the Symmetrix Product Manual, does not disclose a system in

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which a service processor uses mailbox communication with one or more line processors to perform tasks on behalf of the line processors.

Litt is offered for its teaching of a serial bus. Litt does not add any information that would solve the deficiencies of the Symmetrix Product Manual and Van der Wal.

It is thus clear that the Symmetrix Product Manual, Van der Wal, and Litt, taken either alone or in combination, fail to teach or suggest the Applicants' invention as set forth in claim 1 wherein a service processor communicates with line processors via messaging and wherein the "service processor is operable to access storage on behalf of the at least one line processor in response to the contents of the mailbox". The Applicants therefore respectfully assert that claim 1 and its dependent claims 2 - 3 are in condition for allowance.

The Applicants' independent claim 6 contains limitations similar to those of claim 1. The Applicants therefore respectfully assert that claim 6 and its dependent claims 7 - 8 are allowable for the same reasons as set forth with regard to claim 1.

Claim 4 was rejected under 35 U.S.C. 103(a) as being unpatentable over the Symmetrix Product Manual in view of Litt, and further in view of van der Wal, and further in view of Sato et al. This rejection is respectfully traversed.

Claim 4 depends from claim 1 and recites a non-volatile memory. Sato is presented as an example of the use of non-volatile memory. However, the addition of Sato to the Symmetrix Product Manual, Litt, and van der Wal fails to solve the deficiencies of the combination as previously described; that is, the combination fails to teach or suggest a multiprocessing system wherein a service processor communicates with line processors via messaging and wherein the

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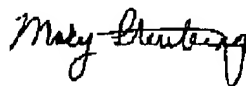
"service processor is operable to access storage on behalf of the at least one line processor in response to the contents of the mailbox". The Applicants therefore respectfully assert that claim 4 is in condition for allowance.

Applicants have made a diligent effort to place the claims in condition for allowance. However, should there remain unresolved issues that require adverse action, it is respectfully requested that the Examiner telephone Mary Steubing, Applicants' Attorney at 978-264-6664 so that such issues may be resolved as expeditiously as possible.

For these reasons, and in view of the above amendments, this application is now considered to be in condition for allowance and such action is earnestly solicited.

Respectfully Submitted,

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Date



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